

MATH 272, TENTATIVE CALENDAR  
SPRING 2020

MONDAY	TUESDAY	WEDNESDAY	FRIDAY
<div>Jan 20th</div> Martin Luther King Day	21st <b>1</b> First day, review. Complex functions.	22nd <b>2</b> Complex functions, phase.	24th <b>3</b> <b>Homework 0 due.</b> Function spaces and Inner products.
27th <b>4</b> Hilbert spaces, symmetries.	28th <b>5</b> Infinite orthonormal bases.	29th <b>6</b> Series and integrals as linear combinations.	31st <b>7</b> <b>Homework 1 due.</b> Projection with bases.
<div>Feb 3rd</div> <b>8</b> Linear operators and adjoints.	4th <b>9</b> Hermitian and differential operators.	5th <b>10</b> Spectra of differential operators.	7th <b>11</b> <b>Homework 2 due.</b> Fourier series.
10th <b>12</b> Cont.	11th <b>13</b> Fourier transforms.	12th <b>14</b> Special functions (distributions).	14th <b>15</b> Cont.
17th <b>16</b> <b>Homework 3 due.</b> Review.	18th <b>17</b> Review.	19th <b>18</b> <b>Take home Exam 1 due.</b> Review.	21st <b>19</b> <b>Exam 1.</b>
24th <b>20</b> Curves and tangent vectors.	25th <b>21</b> Scalar Fields and partial differentiation.	26th <b>22</b> Gradient and integration of scalar fields.	28th <b>23</b> Vector fields.
<div>Mar 2nd</div> <b>24</b> <b>Homework 4 due.</b> Differential calculus of vector fields.	3rd <b>25</b> Laplace operator and flux.	4th <b>26</b> Integral calculus of vector fields.	6th <b>27</b> Conservative potential functions.
9th <b>28</b> <b>Homework 5 due.</b> Cont.	10th <b>29</b> Surfaces and parameterizations.	11th <b>30</b> Cont.	13th <b>31</b> Cylindrical coordinates.

MONDAY	TUESDAY	WEDNESDAY	FRIDAY
16th Spring Break	17th Spring Break	18th Spring Break	20th Spring Break
23rd <b>32</b> <b>Homework 6</b> <b>due.</b> Cont.	24th <b>33</b> Spherical coordinates.	25th <b>34</b> Cont.	27th <b>35</b> Catch-up day.
30th <b>36</b> <b>Homework 7</b> <b>due.</b> Review.	31st <b>37</b> Review.	Apr 1st <b>38</b> <b>Take home</b> <b>Exam 2 due.</b> Review.	3rd <b>39</b> <b>Exam 2.</b>
6th <b>40</b> Higher dimensional ODEs	7th <b>41</b> Partial differential equations.	8th <b>42</b> Laplace and Poisson's equation.	10th <b>43</b> Heat and wave equation. Fourier transforms.
13th <b>44</b> <b>Homework 8</b> <b>due.</b> Cont.	14th <b>45</b> Time dependent Schödinger equation.	15th <b>46</b> Cont.	17th <b>47</b> Maxwell's equations.
20th <b>48</b> <b>Homework 9</b> <b>due.</b> Cont.	21st <b>49</b> Cont.	22nd <b>50</b> PDEs in other coordinate systems.	24th <b>51</b> Cont.
27th <b>52</b> <b>Homework 10</b> <b>due.</b> Review.	28th <b>53</b> Review.	29th <b>54</b> <b>Take home</b> <b>Exam 3 due.</b> Review.	May 1st <b>55</b> <b>Exam 3.</b>
4th <b>56</b> Mini-project: Hydrogen atom.	5th <b>57</b> Mini-project: Hydrogen atom.	6th <b>58</b> Mini-project: Hydrogen atom.	8th <b>59</b> Mini-project: Hydrogen atom.